

## ZAK Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant ZAK.

Catalog # AT4567a

### Product Information

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<b>Application</b>	WB, IF, E
<b>Primary Accession</b>	<a href="#">Q9NYL2</a>
<b>Other Accession</b>	<a href="#">BC001401</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG1 Kappa
<b>Clone Names</b>	3D11
<b>Calculated MW</b>	91155

### Additional Information

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<b>Gene ID</b>	51776
<b>Other Names</b>	Mitogen-activated protein kinase kinase kinase MLT, Human cervical cancer suppressor gene 4 protein, HCCS-4, Leucine zipper- and sterile alpha motif-containing kinase, MLK-like mitogen-activated protein triple kinase, Mixed lineage kinase-related kinase, MLK-related kinase, MRK, Sterile alpha motif- and leucine zipper-containing kinase AZK, ZAK, MLTK
<b>Target/Specificity</b>	ZAK (AAH01401.1, 1 a.a. ~ 455 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 IF~~1:50~200 E~~N/A
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	ZAK Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

### Background

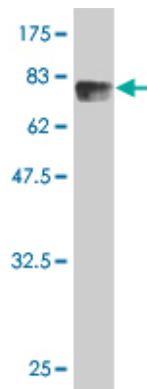
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This gene is a member of the MAPKKK family of signal transduction molecules and encodes a protein with an N-terminal kinase catalytic domain, followed by a leucine zipper motif and a sterile-alpha motif (SAM). This magnesium-binding protein forms homodimers and is located in the cytoplasm. The protein mediates gamma radiation signaling leading to cell cycle arrest and activity of this protein plays a role in cell cycle checkpoint regulation in cells. The protein also has pro-apoptotic activity. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

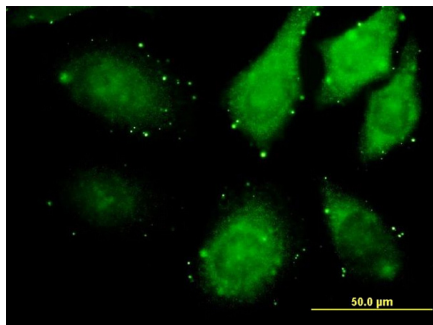
## References

Mapping of phosphorylation sites in human MSK1 activated by a novel interaction with MRK-beta. Wang W, et al. Electrophoresis, 2010 Apr. PMID 20408143. Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. ZAK inhibits human lung cancer cell growth via ERK and JNK activation in an AP-1-dependent manner. Yang JJ, et al. Cancer Sci, 2010 Jun. PMID 20331627. ZAK: a MAP3Kinase that transduces Shiga toxin- and ricin-induced proinflammatory cytokine expression. Jandhyala DM, et al. Cell Microbiol, 2008 Jul. PMID 18331592. Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

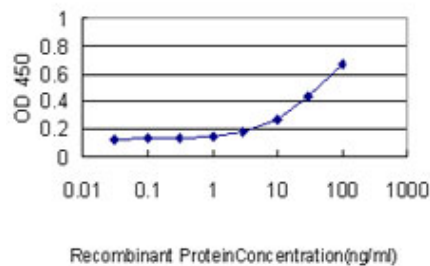
## Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (75.79 KDa) .



Immunofluorescence of monoclonal antibody to ZAK on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged ZAK is approximately 0.3ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.